

Command and Control: US Army Staffs and the Operations Process

A Monograph

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Abstract

Command and Control: US Army Staffs and the Operations Process, by MAJ Charles A. Moore, 51 pages.

The analysis of US First Army staff during World War II demonstrates how a staff effectively supports the commander in commanding and controlling large formations. Staffs and their organization have developed and adapted to the changes and growth in warfare over time. Since its beginnings, foreign thought, often French and Prussian, heavily influenced the US Army's doctrine of staff organization and operations. One can trace our modern staff organization to the lessons learned by the American Expeditionary Force during WWI. During the interwar period, the US Army captured these lessons in doctrine that the First Army used to overcome the challenges and friction it encountered while preparing and directing operations in the Western European Theater. First Army staff effectively assisted their subordinate commanders, staffs, and units and informed the many organizations and units outside their headquarters. Additionally, the staff officers showed a willingness to be adaptable and flexible by creating and modifying organizational structures to overcome challenges. Finally, this study highlights the importance of staff officers recording not just their final products, but also captures their actions in creating those orders and briefings for future study and analysis.

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Acknowledgments

I started this project desiring to better understand how staffs work. Historians and writers have described the actions of the great captains and commanders throughout history, but have comparatively written much less on the actions of the staff officers assisting them. Researching and writing this monograph has increased my understanding of the evolution of staff organizations, and how army and corps staffs can assist their subordinate commanders, staffs, and units.

I want to thank both Dr. Mark T. Calhoun and Dr. Peter J. Schifferle for supporting my curiosity and helping guide me thru this process. I am a much better officer and writer thanks to them. I would like to thank my seminar, the Niners, and seminar leader, Colonel James W. Wright, for continuously challenging and supporting me through this past year. They created one of the most open and enriching environments to learn and I am a much better officer because of them. Finally, I want to thank my wife, Allison, and our children—MacKenzie, Bree, and Welles. Thank you for your patience, support, and reminders to find balance. I am a better man because of you.

Acronyms

ADRP	Army Doctrine Reference Publication
ADSEC	Advance Section of the Communications Zone
AEF	American Expeditionary Force
COSSAC	Chief of Staff to Supreme Allied Commander
ETOUSA-SOS	European Theater of Operations United States Army- Services of Supply
FM	Field Manual
FSR	Field Service Regulations
GHQ	General Headquarters
PME	Professional Military Education
SHAEF	Supreme Headquarters Allied European Force
WWI	World War I
WWII	World War II

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Background

All organizations are made up of human beings and that a sympathetic understanding of their personalities and abilities—and indeed their weaknesses—is essential to continuing smoothness in operations.

—Dwight D. Eisenhower, *The Papers of Dwight David Eisenhower*, Vol 3.

As far back as the ancient Macedonians, leaders relied on assistants to help prepare and control their forces in battle. These were the early beginnings of modern staffs. As the armies became larger and the distances fought over greater, these staffs became more formalized and complex. Without staffs, the commanders would not be able to command and control their armies. Many histories highlight the actions of the great military commanders, but often fail to describe how staffs assisted the commanders in achieving success or failure. These oversights beg the question of how successful staffs assist their commander.

According to current US Army Doctrine Reference Publication (ADRP), 6-0 *Mission Command*, the staff “supports the commander and subordinate commanders in understanding situations, decision making, and implementing decisions throughout the conduct of operations.”¹ The staff accomplishes this by conducting four tasks of conducting the operations process: knowledge management and information management; synchronization of information-related capabilities; and cyber-electromagnetic activities. Staffs enabled (or oversaw, facilitated...) the first two of these three tasks since their creation, but their role in cyber-electromagnetic activities emerged in the modern era, parallel to the development of operational art. When armies grew so

¹ Army Doctrine Reference Publication (ADRP) 6-0, *Mission Command* (Washington, DC: Headquarters, Department of the Army, 2012), 3-5.

large that a series of tactical actions replaced single, decisive battles in deciding the outcome of a war, commanders had to develop ways to affect the enemy's decision making while protecting their own friendly information. Cyber-electromagnetic activities, seen mostly in the use of various radio and computer systems, provide one way for commanders to meet this requirement. Field Manual 6-0 *Commander and Staff Organization and Operations* adds three additional tasks for the staff: support the commander; assist subordinate commanders, staffs, and units; and inform units and organizations outside the headquarters. These additional tasks all support creating a shared understanding, both within the commander's organization and in relationships with other units that integrate their efforts with the commander and staff.

The commander drives the operations process by understanding, visualizing, describing, directing, leading, and assessing throughout operations. In helping to understand the situation, the staff is assisting the commander in the first three tasks of understanding, visualizing and describing. As commanders and staffs encounter the world's growing complexity, the difficulty of creating that shared understanding increases.² Staffs demonstrate their centrality to effective command and control by supporting the commander in these complex processes. While commanders can only focus on one thing at a time, the staff as an organization can focus on a greater number

² For more on complexity and complex adaptive systems, see Robert Axelrod and Michael D. Cohen, *Harnessing Complexity* (New York: Basic Books, 2000); Yaneer Bar-Yam, *Making Things Work: Solving Complex Problems in a Complex World* (NECSI Knowledge Press, 2004); Jamshid Gharajedaghi, *Systems Thinking: Managing Chaos and Complexity: A Platform for Designing Business Architecture*, 2nd ed. (New York: Elsevier, 2006).

of the parts and variables of the problem simultaneously.³ Once the commander and staff create the shared understanding, the staff assists the commander in decision making and implementing those decisions by conducting the operations process of planning, preparing, executing, and assessing.

While doctrine has spelled out this role of staffs since the advent of the operations process, and history bears out their success in accomplishing the associated tasks, one wonders how some staffs achieve success in this role while others do not? Historical analysis of successful US Army staffs in World War I and World War II reveal that they did so largely based on their proficiency in four key components of their staff functions (what the US Army now calls the operations process). Staffs must possess a common understanding of doctrine and staff processes. Militaries have most effectively created that understanding by developing a professional education system that instills these traits into the staff officer. Staff officers themselves must develop and maintain proficiency at their assigned duties and exercise disciplined initiative in carrying them out. An effective staff requires a strong chief of staff or executive officer to coordinate staff activities, enabling the staff to operate and the commander to command. Finally, staffs must work well and cooperate within the staff, but also outside the staff with higher, adjacent, and subordinate staffs and units.⁴

Today's US Army staffs can trace their roots to the American Expeditionary Force (AEF) Staff during World War I (WWI), which reflected some British and French

³ Richard K. Betts, "Is Strategy an Illusion?" *International Security* 25, no. 2 (Fall, 2000): 34.

⁴ Field Manual (FM) 6-0, *Commander and Staff Organization and Operations* (Washington, DC: US Government Printing Office, 2015), 2-1–2-2.

influence. After WWI, the US Army continued to refine staff structure and operations, resulting in the structure and doctrine that guided field staffs during World War II. One of these field staffs—the US First Army staff—participated in the majority of combat operations in Western Europe during the Second World War. When General Omar Bradley took command of the First Army, he merged part of his combat experienced II Corps staff with the First Army's staff, only recently arrived from the states and untested in battle. Upon Bradley's promotion to command the 12th Army Group, he selected his deputy commander, General Courtney H. Hodges, as commander of the First Army—a position he held for the remainder of the war. Both relied heavily on their staffs to assist them in command. The following analysis of these staffs' interactions with their commanders, each other, and other staffs offers lessons that remain relevant to modern US Army staff officers and commanders.

Military Staffs in History

The origins of military staffs and their evolution over the centuries provides context within which one can understand the roles and duties of modern staff officers. As changes in the nature of warfare caused battles to increase in scale, including the number of combat forces, the length of campaigns, and the size of battlefields, military commanders increasingly relied on others to assist them in controlling their forces. Additionally, as technology and processes became more complex, armies sought the advice of technical experts to help them adapt to changes in technology and use new weapon systems effectively.

Ancient western civilizations provide the first examples of early staff officers. Mainly technical experts in logistics and engineering, these proto-staff officers enabled both the Egyptian and Assyrian empires to conquer many of their neighboring states. To

extend the reach of their empire building conquests over large distances, the Persians and the Macedonians further developed staff organization and operations. In 511 BC, the Persian emperor Darius formalized the roles of his intelligence officers, administrative and logistics officers, and engineers.⁵ Meanwhile, Alexander the Great built on his father's reforms, adding both hospitals and provost marshals to existing staff structures. These additions led to increased discipline and health in his armies—capabilities that proved essential in his unprecedented campaigning which resulted in his conquest of the largest empire of the time.⁶ The Romans, who at their height represented the pinnacle of ancient armies, incorporated previous developments in staff procedures and warfighting methods to enhance the effectiveness of their already excellent military organizations—the famed Roman legions. With command changing on a rotational basis, the legions benefited from *tribunes*, who provided continuity and assisted in planning and administration. Additionally, Roman legions excelled in sustaining their forces with early versions of modern-day quartermasters.⁷ After the fall

⁵ J. D. Hittle, 13–19; R. Ernest Dupuy and Trevor N. Dupuy, *The Harper Encyclopedia of Military History* (New York: Harper Collins Publishers, 1993), 24–28.

⁶ Martin Van Creveld, *Command in War* (Cambridge: Harvard University Press, 1987), 27–30; J. D. Hittle, 23–24. Alexander kept most of his father's staff structure in place, but added several special officers who acted in a capacity much like chiefs of staffs and adjutant generals. These “somatophylaxes” were often under Alexander's direct control and entrusted with special duties. For example, Eumenes of Caria functioned as Alexander's secretary, responsible for keeping the royal diary and serving as a paymaster, and in combat he performed the additional function of transmitting messages to and from Alexander's subordinates. Additionally, Alexander used surveyors who gathered information on routes, distances, resources, and camping grounds.

⁷ Jonathan P. Roth, *The Logistics of the Roman Army at War (264 BC – AD 235)* (Leiden and Boston: Brill, 2012), 257–59, 272–75; Yann Le Bohec, *The Imperial Roman Army* (New York: Hippocrene Books, 1994), 38–39, 51–53.

of Rome, military thought stagnated—no major advances in military art or science emerged in the centuries before the dawn of the Renaissance and the Enlightenment.⁸

At the end of the Middle Ages, the Western world rediscovered classical thought during the Renaissance of the fourteenth century, leading to the rise of military theory and new developments in staff organization and procedures. Technological advancements continued to drive staff development and specialization of staff officers. Officers became more specialized in the employment of the increasingly complex artillery, and the increased sustainment requirements required better logisticians and administrators. Additionally, the birth of firearms changed how armies were organized and fought, resulting in armies becoming further spread out. This increased the difficulties in command and further required commanders to rely on assistants to help control their armies.

The Roman author Publius Flavius Vegetius Renatus helped save Roman military doctrine with his *De Re Militari*. Attempting to reverse the decay of the Roman armies, Vegetius collected and synthesized writings, customs, and regulations from earlier Roman armies. Emphasizing the importance of discipline and the strength of the infantry, Vegetius became one of, if not the most, read military theorists leading up to the Renaissance, his works being read by Richard the Lionheart, Charlemagne's

⁸ Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (Oxford: Oxford University Press, 2001), 3; Felix Gilbert, "Machiavelli: The Renaissance of the Art of War," in Peter Paret, editor, *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton: Princeton University Press, 1986), 11–15; Beatrice Heuser, *The Evolution of Strategy* (Cambridge: Cambridge University Press, 2010), 52–53.

commanders, and Montecuculli to name a few. Considered by many to be the first modern military theorist, Niccolo Machiavelli based much of his *The Art of War* on Vegetius' on *De Re Militari*. Through Machiavelli, Vegetius's ideas and thoughts continued to influence military minds for centuries more.⁹

Historians have described Maurice of Nassau and Gustavus Adolphus as two of the most influential leaders on staff development during the seventeenth century. Maurice stressed the importance of schooling and professional qualification of officers, creating one of the first military academies. Gustavus Adolphus formalized the staff structure of regiments by creating the first chief of staff, introducing permanent judge advocates to assist with discipline, and stressing the importance of logistics. With these changes, the staffs could sustain larger armies and conduct continued warfare.¹⁰

⁹ John Clarke, trans. "The Military Institutions of the Romans (De Re Militari) by Flavius Vegetius Renatus," in *Roots of Strategy: The 5 Greatest Military Classics of All Time*, ed. T. R. Phillips (Harrisburg: Stackpole Books, 1985), 67–72; Maurice de Saxe, *Reveries on the Art of War*, ed. and trans. Thomas R. Phillips (Harrisburg: The Military Service Publishing Company, 1953), 17–18, 36; Gat, 3, 8–11; Gilbert, 22–23, 27; J. D. Hittle, 30; Niccolo Machiavelli, *The Art of War*, trans. Neal Wood (Cambridge: Da Capo Press, 2001), ix, xx–xxvi, xxxviii–xlvi; N. P. Milney, trans. *Vegetius: Epitome of Military Science* (Liverpool: Liverpool University Press, 1996), xiii–xiv, xlii–xliii.

¹⁰ J. D. Hittle, 37–46. Gustavus' regimental headquarters included a command section of a colonel, a lieutenant colonel, and a major. It also contained the chief quartermaster, two chaplains, two judge advocates, four surgeons, four provost marshals, an assistant provost marshal, and clerks. The chief quartermaster continued to gain prominence among the staff with the responsibility to supervise the organized supply systems. As in the Prussian armies, the quartermaster was not just responsible for supply, but also for the movement and quartering of forces. The quartermaster used commissaries to distribute the supplies to the sergeant majors, who directly issued the supplies to the soldiers. This use of the sergeant major added administrative functions to their responsibilities for orders and drill. The addition of permanent judge advocates allowed Gustavus to publish field regulations and create the courts martial. This system

Because he led coalitions made up of military forces from many different nations, Gustavus influenced the doctrine, organization, and staff procedures of most European armies of his time—notably including those of France and Prussia.¹¹

The Seven Years War revealed the need for formalized training and education of staff officers. Many of the French Army's mistakes during the war occurred because of staff officers' ignorance of their duties.¹² Once appointed director of the French military academy at Grenoble, Pierre de Bourcet reformed the education system and *service d'état-major des logis des armées*—the French general staff.¹³ Using former instructors of this school, Frederick the Great established the *Academie des Nobles*, the beginnings of what would become the famed *Kriegsakademie*.¹⁴ These schools provided the necessary foundation to develop staff officers capable of conducting modern war.

allowed the commanders to exercise control and maintain just discipline over their ever-growing armies.

¹¹ David Chandler, *The Campaigns of Napoleon* (New York: Macmillan Publishing Company, 1966), xxvii–xxxix; de Saxe, 17; J. D. Hittle, 46, 88–89, 94; Gunther E. Rothenberg, “Maurice of Nassau, Gustavus Adolphus, Raimondo Montecuccoli, and the ‘Military Revolution’ of the Seventeenth Century,” in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton: Princeton University Press, 1986), 32–64. Cardinal Richelieu hired the army of Bernard of Saxe-Weimar. The structure and thought of Bernard's staff infected the French army and reforms spread throughout the army. The one change the French did make on Gustavus system was the replacement quartermaster with an intendant, responsible for all the administration of the army.

¹² J. D. Hittle, 91.

¹³ J. D. Hittle, 89–93.

¹⁴ Robert M. Citino, *The German Way of War* (Lawrence: University Press of Kansas, 2005), 2; T. N. Dupuy, *A Genius for War, The German Army and General Staff, 1807-1945* (Englewood Cliffs: Prentice-Hall, Inc., 1977), 16; J. D. Hittle, 57–63; Bronsart

This increased professionalization led to an important development—the rise in importance of the chief of staff. The French Revolution sparked an increase in military development and advancement. Napoleon’s chief of staff, Pierre Alexandre Berthier, first outlined how staffs should operate in his 1796 *Document sur le Service de L’Etat-Major General a l’Armees des Alpes*. He described the chief of staff as the “central pivot of all staff operations,” and that “speed is the most important thing in general staff work.” Additionally, he advocated organizing the staff into four general staff sections, similar to the organization of modern US Army staffs. Soon after, in 1800, Paul Thiebault published the first manual on staff organizations and operations, *Manuel des Adjutants Generaux et des Adjoints Employes dans les Etats-Majors Divisionnaires des Armees*.¹⁵

Following its defeat at Jena, the Prussians reorganized their military system in order to overcome Napoleon. In 1807, Major General Scharnhorst headed the commission to reorganize the Prussian army, expanding the education system of the army and creating a dual command function. Unlike the French, the Prussian Chief of Staff was now a junior partner of the Army’s commander. While the commander retained the final decision, the chief of staff shared the results of those decisions. The chiefs of

von Schellendorf, *The Duties of the General Staff*, trans. W. A. H. Hare (London: C. Kegan Paul & Co., 1877), 12–19.

¹⁵ Chandler, 373–74; J. D. Hittle, 95–103. J. D. Hittle describes four sections, the first three similar to modern staff sections of personnel, intelligence, and logistics. The fourth section was responsible for establishing, organizing, and policing the headquarters. It possibly functioned similar to our modern headquarters company. Publishers quickly distributed Thiebault’s manual throughout the world in many different languages. It detailed the organization of the staff, the division of work between the staff sections, and the responsibilities of specific staff officers within each of the sections. Additionally, it included detailed descriptions on structure, purpose, and components of various reports, and the preparation and drafting of orders. Thiebault’s description of the chief of staff as the director of the staff is closer to the modern US Army’s chief of staff rather than the Prussian’s use of the chief of staff as a joint commander.

staff gained the authority to issue orders, and check and supervise how subordinate units executed those orders. Just as Napoleon reaped the benefits of advances in French staff organizations and operations, Moltke the Elder benefitted from Scharnhorst's reforms. His victories in the Austro-Prussian War and the Franco-Prussian War would have been unlikely without them.

Early US Army staffs were not as well organized and structured as their European counterparts. The early Continental Army's staff was a representation of the Continental Army itself, composed of various officers with a wide variety of staff experience and training from different military systems. It was not until George Washington selected the Prussian Baron Friedrich Wilhelm von Steuben to serve as the army's Inspector General that the staff became organized and efficient. Before coming to America, Steuben served in Frederick the Great's Prussian Army, serving on various staffs during the Seven Years War. Following that war, Steuben was one of the first officers selected for Frederick's new school to train officers on modern military theory.¹⁶ While serving as Washington's Inspector General, Steuben instilled the basics of discipline and drill into the Continental Army during the winter of 1777 at Valley Forge. Throughout the remainder of the war, Steuben served Washington in a variety of roles, carrying out duties that resembled those of officers serving in each of the four main staff sections. These duties included producing staff estimates and general orders for Washington that helped him win the war.

During the century following the Revolutionary War, the US Army made few effective advances to staff organization and operations, despite congress' acts forming

¹⁶ J. D. Hittle, 170–73.

the American General Staff in 1796 and establishing the United States Military Academy in 1802. Both the Union and Confederate armies organized their staffs for the American Civil War using the same Army Regulations of 1861; few differences existed between the staffs of the Continental Army and those of the Civil War.¹⁷ The next two great developments in staff organization and operations were the Root reforms and the US Army experiences in World War I. These two events provided the foundations on which the US Army built modern staff organizations and functions.

President McKinley appointed Elihu Root to serve as the Secretary of War in 1899. As Secretary, Root initiated several long-lasting reforms in the US Army. These included educational reforms including the creation of the US Army War College in Washington, DC and the evolution of the Infantry and Cavalry Schools into the Command and General Staff College at Fort Leavenworth. Together these schools provided the expanded professional military education (PME) that prepared officers to serve as effective commanders as general officers, or competent personnel to serve on the staffs of the larger headquarters needed for corps, armies, and army groups. By 1903, Root established the national general staff and created a new duty position for the Army's most senior officer: the Army Chief of Staff. Root used the German General Staff as the model for new general staff. These reforms reinvigorated the US Army's intellectual growth and began a process of transformation that led to the activation of the First Field Army in 1910.¹⁸

¹⁷ J. D. Hittle, 183–84, 189.

¹⁸ Michael A. Bonura, *Under the Shadow of Napoleon: French Influence on the American Way of Warfare from Independence to the Eve of World War II* (New York:

While the Field Service Regulations (FSR) of 1910 and 1913 enumerated the personnel making up the staff of a field army, they did not describe the purpose or functions of those staffs or their personnel. This information first appeared several years later in the 1917 FSR, which described how the chief of staff could organize the staff. The 1917 FSR described separation of the staff into a general staff group and a technical and administrative group. The general staff group consisted of three subdivisions: a combat section, an administrative section, and an intelligence section.¹⁹ The technical and administrative group consisted of the representatives and officers from various staff corps and departments assigned to the headquarters: “record, inspection, law, supply, sanitary, engineer, ordnance, and signal.” These offices served as technical advisors to the commander and controlled the personnel and detachments of their respective corps that served under the command of the field army. While these organizational structures soon changed, they provided a starting point for the creation of the American Expeditionary Forces (AEF) staff when the US Army found itself preparing for WWI.

New York University Press, 2012), 175–77, 187–88; J. D. Hittle, 196–210; David W. Hogan, *Command Post at War: First Army Headquarters in Europe, 1943–1945* (Washington, DC: United States Army Center of Military History, 2000), 3; Matheny, 20.

¹⁹ United States War Department, *Field Service Regulations* (Washington, DC: Government Printing Office, 1917), 131. The combat section—much like the modern US Army’s G-3 Operations and G-5 Plans sections—dealt with “orders, movements and disposition of the forces; combats, detachments; war diaries.” The administrative section oversaw the functions of today’s G-1 and G-4: “organization, losses, reinforcements, police and discipline; questions of supplies of all kinds; signal and telegraph service; evacuation and care of the sick or wounded; relations with lines of communication and all general correspondence.” The intelligence section, functioned like the modern G-2, but also handled G-9 civil affairs tasks: “the movements and dispositions of the enemy, including exploration, reconnaissance, and the gathering and distribution of information; . . . relations with the civil authorities of the occupied territory.”

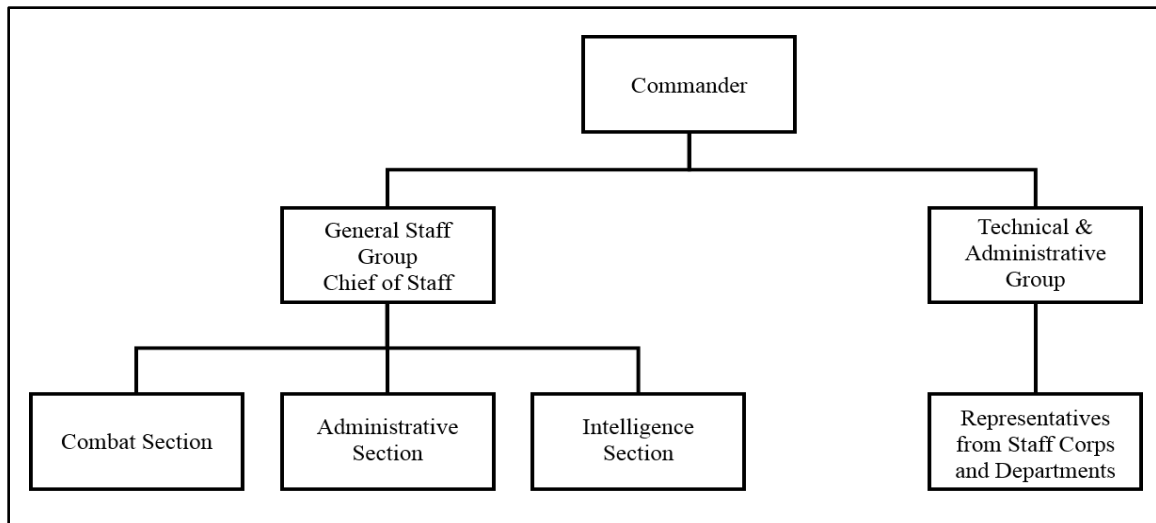


Figure 1. 1917 FSR Staff Organization

Source: Data from the Field Service Regulations 1917 (Washington, DC: Government Printing Office, 1917), 131.

Upon America's entry into WWI, Pershing organized the AEF staff by combining current American doctrine and elements of both the British and French staff systems. The French Army had the greatest influence largely because of its role in training newly arrived AEF officers—in both academic and combat settings—and as a result of the need for close coordination between the AEF and the French units that it worked with. The AEF standardized its general staffs by organizing them into five sections, each headed by an assistant chief of staff: the G-1 (administrative); G-2 (intelligence); G-3 (operations, plans, and the employment of combat troops); G-4 (supply and services); and G-5 (training). This organization remains the basic staff organization for current US

Army general staffs.²⁰ In order to prepare officers for service in this new staff structure after the closure of the Leavenworth schools, the AEF established a short course at Langres, France, to train new and inexperienced officers on large unit operations. On August 10, 1918 General Pershing activated the First Army, adding a deputy chief of staff to manage support activities for the chief of staff, and creating a special staff similar to the 1914 FSR's technical and administrative group. The First Army commanded AEF units from August 10, 1918, through the Meuse-Argonne campaign and the German spring offensives, until the armistice abruptly ended the war on November 11, 1918. Six months later, the First Army headquarters demobilized and returned home. During the interwar period, army-wide troop cuts reduced the headquarters to a mere skeleton of its wartime organized strength.²¹

During the interwar period, the US Army reestablished its professional military education system. The US Army captured the lessons learned from WWI in the 1923 *Field Service Regulations* and published a *Staff Officers' Field Manual* in 1928. Updated in 1932, the manual remained the primary resource for staff training and operations until 1940's Field Manual (FM) 101-5, *Staff Officers' Field Manual: The Staff and Combat Orders*. FM 101-5 provided the doctrinal foundation for US Army staffs throughout WWII with only minor changes.²² As described in FM 101-5, the staff consisted of two main parts—the general staff group and the special staff group. The general staff group, under the supervision of the chief of staff, consisted of four divisions responsible for personnel,

²⁰ Hittle, 210–14; Peter J. Schifferle, *America's School for War: Fort Leavenworth, Officer Education, and Victory in World War II* (Lawrence: University Press of Kansas, 2010), 10–11.

²¹ Hogan, 7–9.

²² Schifferle, 59.

military intelligence, operations and training, and supply and evacuation. Additionally, the general staff included a deputy chief of staff and the secretary of the general staff. The technical specialists and heads of services made up the special staff. The manual described the duties of the staff: to “render professional assistance to the general officers over them” and to assist in the planning, preparation of orders and supervision of operations.²³ The US First Army staff used FM 101-5 as the basis for organizing and operating during World War II.

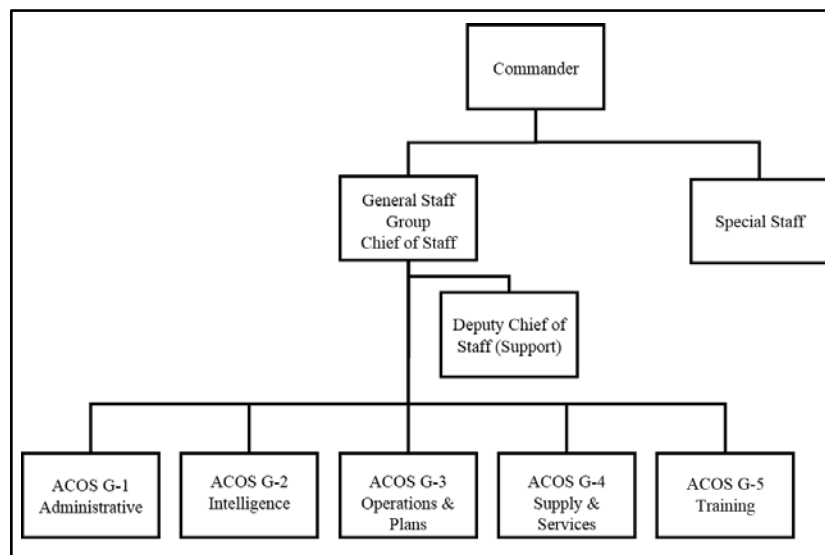


Figure 2. The AEF Staff Organization

Source: Data from J. D. Hittle, 210–14.

²³ United States War Department, *Field Manual 101-5 Staff Officers' Field Manual: The Staff and Combat Orders* (Washington, DC: US Government Printing Office, 1940), 5.

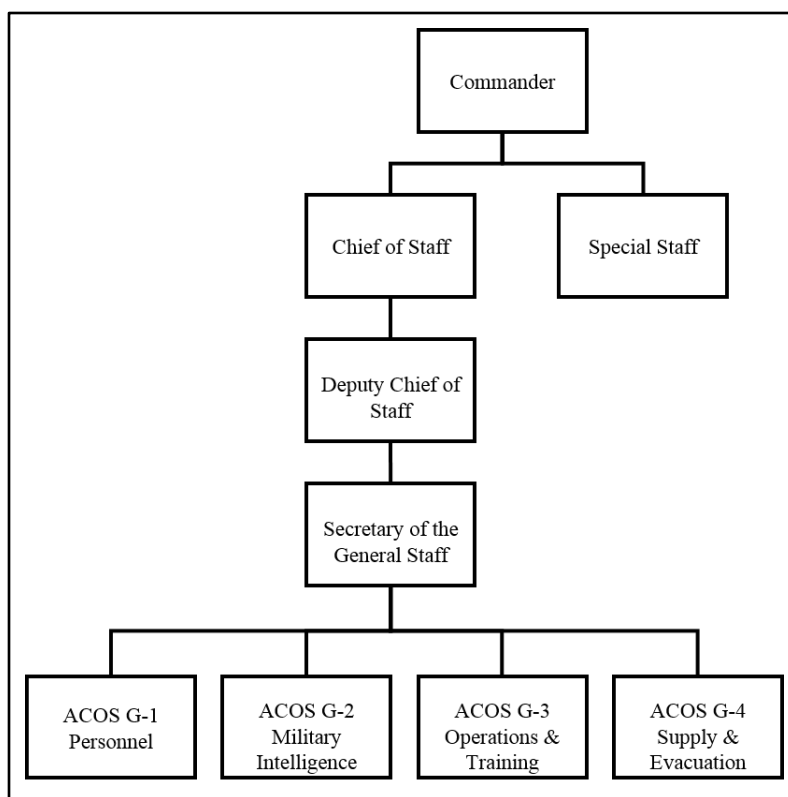


Figure 3. 1940 FM 101-5 Staff Organization

Source: Data from Field Manual 101-5, *Staff Officers' Field Manual: The Staff and Combat Orders* (Washington, DC: US Government Printing Office, 1940), 5.

Methodology and Significance

One can see the effects of successful staff processes in three case studies from the WWII Western European Campaign: Operation Neptune from 4 to 26 June 1944; Operation Cobra from 25 to 31 July 1944; and Operation Lumberjack from 23 February to 7 March 1945. The analysis of each of the case studies demonstrates the effectiveness of the US First Army staff in its efforts to assist the commander in the exercise of mission command. The analysis uses four criteria from current US Army doctrine to evaluate the US First Army Staff. In addition to supporting the commander,

staffs should also assist their subordinate commanders, staffs, and units in accomplishing their missions. To coordinate, synchronize and resource operations, staffs must keep units and organizations outside the headquarters informed. Staffs should also be adaptable, flexible, cooperative, and apply critical and creative thinking to overcome the friction and chance of war. Finally, a strong and effective chief of staff is necessary to coordinate staff activities, especially important for large staffs of corps and above. While some modern doctrinal terms—like the operations process—did not exist at the time, appropriate corollaries did exist in WWII staff functions to facilitate analysis.²⁴

The three case studies of the First Army provide an examination of a staff as it successfully fought during the final campaigns of World War II in the European Theater of War. Operation Neptune reveals how a commander formed a staff and how well that staff coordinated with units and organizations outside its own headquarters as it prepared for and conducted the invasion of Normandy. Operation Cobra enables analysis of how a staff assists the commander in a change of mission in both operational and administrative tasks simultaneously. First Army had secured a beachhead but needed to conduct the breakout in order to exploit its gains. At the same time, First Army was beginning to transition many of the administrative tasks as the senior US Army headquarters to the newly formed 12th Army Group. During this operation, the staff

²⁴ ADRP 6-0, 3-5; and FM 6-0, 2-1. The analysis originally included ten criteria—the seven staff tasks in current US Army doctrine and three additional criteria. Of these, only three of the criteria proved significant. The fourth, a strong and effective chief of staff that coordinates the staff activities, was kept to highlight the need and importance for staff officers to record not just the final products they produce, but also their actions in creating those orders and briefings—primarily who they communicated with, and how, during various staff actions. This will assist the US Army’s ability to learn how to improve staff functions by providing sources to study historical accounts of army operations.

operated while command of First Army was transitioning from General Omar Bradley, who was assuming command of the US 12th Army Group, to the First Army Deputy Commander, Lieutenant General Courtney H. Hodges. Finally, Operation Lumberjack enables examination of the staff after its personnel had gained more than a year of experience operating together to determine to what degree they identified and overcame inefficiencies in their staff processes observed during the earlier operations.

Formation of the US First Army Staff

While implementing protective mobilization in preparation for possible entry into World War II, the US Army conducted the GHQ maneuvers of 1941—a series of Army-level maneuvers conducted in Louisiana and the Carolinas. The First Army, commanded by Lieutenant General Hugh A. Drum, performed poorly during the Carolina maneuvers, with many supply, communication, and control problems.²⁵ Due to this poor performance, Marshall and Eisenhower chose to replace Drum with Lieutenant General Bradley when it came time to deploy First Army to England in 1943. Eisenhower recommended Bradley based on his excellent command of II Corps during the Sicily campaign.²⁶ To help Bradley prepare First Army for the amphibious assault of

²⁵ Mark T. Calhoun, *General Lesley J. McNair: Unsung Architect of the US Army* (Lawrence: University Press of Kansas, 2015), 224–26; Kent Roberts Greenfield, Robert R. Palmer, and Bell I. Wiley, *The Organization of Ground Combat Troops* (Washington, DC: United States Army Center of Military History, 1987), 43–47; Hogan, 12–13.

²⁶ Omar Bradley, *A Soldier's Story* (New York: Henry Holt and Company, 1951), 9–10; Dwight D. Eisenhower and United States, *The Papers of Dwight David Eisenhower*, vol. 3 (Baltimore: John Hopkins Press, 1970), 1605; Carlo D'Este *Decision in Normandy* (New York: Harper Perennial, 1994), 45; Gordon A. Harrison, *Cross-Channel Attack* (Washington, DC: United States Army Center of Military History, 1993), 114; Russell F. Weigley, *Eisenhower's Lieutenants* (Bloomington: Indiana University Press, 1981), 82–85.

Normandy, Eisenhower let Bradley take with him any of his II Corp staff officers. Eisenhower gave Bradley the additional task of forming an Army Group Staff to coordinate the efforts of the multiple US field armies. Bradley and his chief of staff, Brigadier William B. Kean, selected thirty-eight officers to transfer with them to the deploying First Army. Upon arriving in England, the two staffs merged with some tension, but remained professional and worked together as they began planning. In October 1943, the First Army established its headquarters in Bristol, England. It immediately assumed responsibility for administration and training of American forces in England. To operate effectively, the new staff had to formalize the organization of the headquarters and merge personnel from two staffs together.²⁷

The First Army organized itself using the general structure provided in FM 101-5 with a chief of staff, two deputy chiefs, and a secretary of the general staff, four general staff sections, and fourteen special staff sections. The First Army added a deputy commander, but Hodges could not join First Army until February 1945. As the chief of staff, Kean performed the role until Hodges arrived. Kean served as the First Army's chief of staff for the rest of the war, and was a dominant figure within the staff. The two deputy chiefs of staff, Colonel Charles F. Williams and Colonel Samuel L. Myers divided duties, overseeing administration and operations respectively. Many of the special staff and the G-1 reported to Williams, while the G-2, G-3, and G-4 sections reported to Myers. From II Corps staff, Bradley brought his G-2, G-3, and G-4, Colonels Monk Dickson, Truman C. Thorson, and Robert W. Wilson. The G-1, Colonel Joseph J. O'Hare, came from stateside. Most of the staff section chiefs had attended either the

²⁷ US First Army Headquarters, *First US Army Report of Operations 20 October 1943 – 1 August 1944*, 13–14.

prewar Command and General Staff School or the ten-week staff course established by Lieutenant General Lesley J. McNair from 1939 to 1940. This provided a common shared understanding on staff processes and helped greatly in integrating the staff together.²⁸

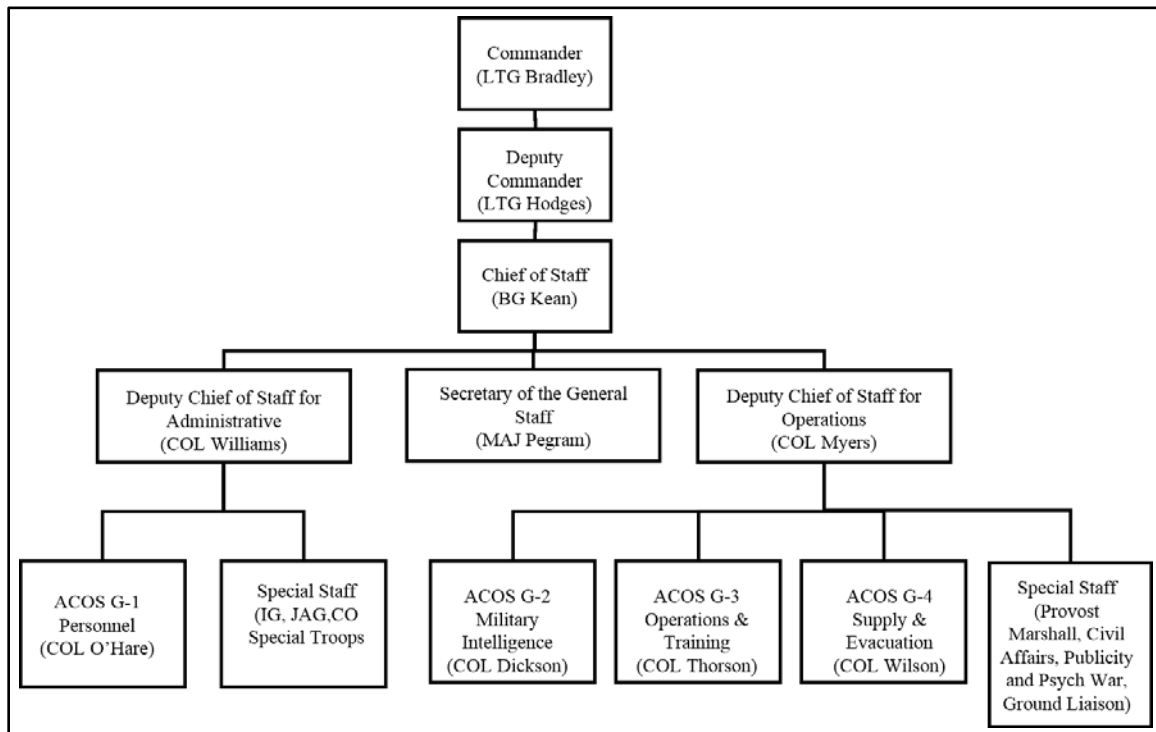


Figure 4. US First Army Staff Organization, 1943

Source: Data from Omar Bradley, *A Soldier's Story* (New York: Henry Holt and Company, 1951), 176–77; David W. Hogan, *Command Post at War: First Army Headquarters in Europe, 1943–1945* (Washington, DC: United States Army Center of Military History, 2000), 25–29.

²⁸ Bradley, 176–77; Calhoun, 191–92; Hogan, 25–29; *First US Army Report of Operations 20 October 1943 – 1 August 1944*, 15–16; Schifferle, 121–22, 150–56; Weigley, 84–85.

Expecting to begin planning for Operation Overlord, the staff instead began emergency planning for a German collapse and surrender, one of three contingences the Chief of Staff to Supreme Allied Commander (COSSAC) was preparing. Called Rankin C, this planning provided the opportunity to fuse the staff together into a functioning operating team and gain knowledge on enemy dispositions and terrain. In the final plan, the US First Army would immediately send ten American divisions across the English Channel in response to a German collapse. Due to the constant arrival of new troops and equipment, the US First Army planners made constant revisions.²⁹

On November 29, 1943, Supreme Allied Headquarters designated the British 21st Army Group responsible for the planning and execution of the invasion until Eisenhower allocated an area of responsibility to the US First Army Group. Bradley immediately began detailed joint planning with his new commander, Montgomery, and the 21st Army Group, moving thirty members of his G-2, G-3, and G-4 to London, led by Chief of Staff Kean. The 21st Army Group established planning syndicates, composed of members from 21st Army Group, the British Second Army, and the US First Army, to develop the Initial Joint Plan. After six weeks of planning, the 21st Army Group published the Initial Joint Plan on February 1, 1944. The plan detailed the boundaries and objectives of the two armies. The First Army would be responsible for the early capture of the port of Cherbourg and the expansion of a beachhead south towards the British Second Army.³⁰

²⁹ Bradley, 200; Harrison, 174; *First US Army Report of Operations 20 October 1943 – 1 August 1944*, 24–27.

³⁰ Harrison, 43, 116; Hogan, 46–47; Forrest C. Pogue, *The Supreme Command* (Washington, DC: United States Army Center of Military History, 1989), 107; *First US Army Report of Operations 20 October 1943 – 1 August 1944*, 25.

The First Army planning group worked relentlessly to complete its assault plan. On February 25, 1944, the staff published Army Plan Neptune. To enable further concurrent, detailed planning, the First Army distributed copies to higher, adjacent, and subordinate units. In its published operations plan, First Army's mission was to "launch a simultaneous assault on beaches on D-Day and H-Hour; . . . capture on D Day objectives as shown in Assault Plan, and thereafter . . . advance as rapidly as the situation permits, capturing CHERBOURG with the minimum of delay and developing VIERVILLE-SUR-MAR, COLLEVILLE-SUR-NE beachhead southwards towards ST. LO in conformity with the advance of the Second British Army."³¹

Operation Neptune

Background

Having issued the operations plan for the invasion, First Army brought its subordinate Corps to London to brief the commanders. V Corps, under Major General Leonard T. Gerow, would assault Omaha beach and push forward to establish a line from Isigny to Bayeux. Meanwhile, VII Corps under Major General J. Lawton Collins would assault Utah beach, link up with the airborne divisions dropping directly behind the beaches, and then capture Cherbourg. After the briefing, the Corps established planning groups in London while US First Army provided liaison officers to the groups to assist planning and incorporate changes in the plan. Additionally, US First Army focused on formalizing and building relations between the army and the Western Naval Task Force, and between the army ground and air forces. The engineers and artillery conducted joint

³¹ Harrison, 43; US First Army Headquarters, *Operations Plan Neptune* (US First Army, 25 February, 1944), 6.

training in preparation for the invasion as well. The First Army staff increasingly came to understand the immensity of the task it faced.

As the planning for the invasions continued and staff personnel identified new requirements, the staff continued to grow. To address these new requirements and continue conducting the operations process, the First Army created new staff sections while expanding existing sections.³² Just before the invasion, the headquarters had grown from 759 to 922 soldiers assigned.³³ Just as the staff grew, so did the support units under the First Army's control. On March 18, 1944, Bradley delegated operational control of special staff branch units to the special staff section chiefs. This relieved Bradley from many administrative responsibilities, allowing him to focus on the main effort of the operation, the Corps' offensive combat operations.³⁴ By April, the planning group in London returned to the main Army headquarters in Bristol to begin final preparation for the invasion.

Multiple exercises led to the identification of changes needed in the staff structure and operations processes. Two command post exercises in December 1943 and January 1944 revealed that the doctrinal division of the staff into forward and rear

³² Hogan, 59. With the addition of armored forces, US First Army added an armor section on 4 March 1944. It also created publicity and psychological warfare sections in anticipation for actions after the assault. Finally, the staff added a small amphibious section to help coordinate the assault operations.

³³ Hogan, 26, 59.

³⁴ Hogan, 300–302. First US Army Staff Memorandum 24 clarified command by defining complete command and operational control. Complete command “entails all the prerogatives of a Commander as described by Army Regulation 600-20.” Operational control allows a commander to delegate functions to an individual to allow the commander to control large number of units while being relieved of many administrative responsibilities. In this memo, Bradley delegated six functions to the special staff section chiefs over the units of their respective branches.

echelons would not allow for adequate command and control of units split by the English Channel. To overcome these challenges, the staff adapted current doctrine and divided into three separate sections: the command, supply, and base echelons. The command echelon would locate near the corps' rear boundary, and would assist the commanding general in preparing plans and supervising operations. The supply echelon would position representatives from the army supply agencies—required to support the planned operations—closer to the front. The base echelon would locate far to the rear and conduct the administration of the army. US First Army conducted a final training exercise, Brass Hat, in May in order to train the command and supply echelons on orderly movement and reestablishment of the command posts and communications systems.³⁵

The final full dress rehearsals for the assault occurred in late April and early May. From 27 to 28 April, exercise Tiger tested the VII Corps assault plan under the most realistic conditions possible. V Corps followed closely behind from 3 to 8 May with exercise Fabius. Although identifying a need for better traffic control during the embarkation phase, these exercises went smoothly and the units made no major changes to the existing plan.³⁶

³⁵ Hogan, 60–66. The signal detachments participated in numerous other communications exercises that spring, Carefree and Candle. In addition becoming more proficient at establishing and reestablishing their own equipment, these exercises assisted in integrating the American communications equipment with the British.

³⁶ Harrison, 270.

Narrative

On June 3, the First Army commander and staff departed Bristol for various ports to board the command ships. The base echelon remained in Bristol to continue administration support. Bradley boarded the *Augusta* with a small group headed by Kean. Hodges boarded the *Achernar* with another small group as the alternate command post. The remainder of the command and supply echelons boarded three separate Landing Ship, Tank (LST). Poor weather postponed the operation for 24 hours. In the early hours of June 6, the invasion began. First Army's G-2 and G-3 sections monitored the battle from the operations center aboard the *Achernar*. Communications were poor with both the units ashore, other ships, and the rear echelons in Britain. To overcome this, the staff relied on monitoring five separate nets and establishing their own command net with the corps headquarters and the two command posts aboard the *Augusta* and *Achernar*.³⁷ Additionally, Bradley and Hodges both sent staff officers ashore to gain first hand understanding of how the battle was progressing. First Army then reported their understanding and assessments to the 21st Army Group and Supreme Headquarters Allied European Force (SHAEF).³⁸ By the end of D-Day, First Army had succeeded in establishing beachheads in Normandy and was beginning to push forward to establish the lodgment. V Corps, at Omaha beach, established a narrow front between St. Laurent and Colleville about 2,000 yards deep. VII Corps, at Utah

³⁷ Hogan, 77–78. The radio nets included the V Corps at Omaha beach, the 4th Infantry Division at Utah, the G-2 liaison with the IX Tactical Air Command, and the 21st Army Group's tactical and main echelons.

³⁸ Bradley, 268–78; Hogan, 77–78; Sylvan, 8–12.

beach, had established a deeper lodgment and linked up with the 82nd Airborne Division. German forces were holding and requesting reinforcements.

The next morning, General Montgomery directed First Army to delay its capture of Cherbourg until it captured all of the original D-Day objectives and connected the two beachheads. The priority of operations became linking the two beachheads and continuing the buildup of forces. First Army continued to keep its various organizations informed by monitoring the nets and receiving regular reports from the subordinate units. It also heavily relied on battlefield circulation by commander and the senior staff officers to keep abreast of operations and inform units outside the headquarters. Additionally, First Army had a small liaison group of ten officers that assisted Bradley in sharing First Army's situation and learning higher, lower, and adjacent units' situation and intentions. While the Corps had established their command posts on shore the evening of June 6, First Army began establishing its command post ashore on June 9. By June 10, Bradley was ashore with his staff from the *Augusta*, while Hodges and the remainder of the forward staff disembarked on June 11. To assist the corps' operations, the staff immediately relieved the corps of the responsibility and began resolving the delays in buildup of forces at Omaha beach.³⁹

While buildups on Utah beach were close to schedule, the tough fighting at Omaha beach caused delays in the overall timing of the landings. The G-4, Wilson,

³⁹ Rick Atkinson, *The Guns at Last Light* (New York: Henry Holt and Company, 2013), 90; Bradley, 282; Eisenhower, *The Papers of Dwight David Eisenhower*, 3: 1915–16; Hogan, 79–85; Sylvan, 12–13; Headquarters, US First Army, *Operations Plan Neptune*, 8–9.

chaired a number of conferences between First Army, V Corps, the European Theater of Operations, United States Army-Services of Supply (ETOUSA-SOS), and the Navy to coordinate a solution to overcome the difficulties and confusion of the unloading at the beaches.⁴⁰ Bradley finally agreed to unload LSTs and other landing craft as they arrived regardless of the cargo, in order to clear the backlog of ships offshore. Additionally, Wilson established a Water Transportation Control within the First Army amphibious section, to maintain all of the data on the shipping of supplies to the beaches. As First Army transferred responsibility of the beaches to the Advance Section of the Communications Zone (ADSEC), it also transferred this staff section on 19 June.

The G-2, Dickson, created a target subsection to assist the collation and transmission of intelligence on the large number of artillery, air, and other targets. Additionally, the G-2 section collected and analyzed reports from all the subordinate units, prisoner interrogations, and reconnaissance assets. It then published summaries to subordinate, adjacent, and lower units to inform them of their analysis three times a day. Dickson would also prepare special estimates as required for sensitive or critical issues.⁴¹

By June 12, 101st Airborne Division's capture of Carentan completed the linking of V and VII Corps and the Utah and Omaha beaches. First Army could finally shift focus to capturing its original objective of Neptune, the capture of Cherbourg. The Cherbourg Port would enable the buildup and sustainment of Allied forces, and allow the Allies to focus on breaking out and attack southward. As reports began to come in of a possible

⁴⁰ Eisenhower, *The Papers of Dwight David Eisenhower*, 3: 1956; Hogan, 81–82; Sylvan, 16.

⁴¹ Hogan, 83.

German counter-attack to retake Carentan, Dickson advised Bradley to reinforce VII Corps' defense of Carentan. Though pulling forces away from the advance on Cherbourg, Bradley's decision to move two armored battalions to the Carentan area allowed them to help VII Corps repel the German attack on June 13.⁴²

To relieve the corps staffs of the buildup responsibilities at the beachheads, First Army established the corps rear boundaries and assumed direct control over the service troops on June 13. The G-4 immediately began establishing supply dumps, truck heads, and hospitals for both the corps and army rear area, allowing the corps to push further forward. Each of the special staff sections established their own control systems, which informed the G-4 daily on collected stock status and evacuation numbers. Additionally, the principal special staff officers met daily to coordinate their activities and receive guidance from the G-4.⁴³

Ammunition was the most critical supply that plagued First Army, causing First Army to place restrictions on the use of ammunition on 15 June. As First Army began to regain time, weather struck. The storm on 19 June destroyed the artificial port at Omaha. The First Army staff established a board to investigate and provide an estimate for the next thirty days on the amount of ammunition and number of weapons in action. The staff developed new restrictions and rationing in an attempt to overcome the shortage and assist VII Corps attack to capture Cherbourg. Even with these restrictions in place, Bradley still had to limit VIII Corps operations in order to support VII Corps attack on

⁴² Bradley, 290–93; Eisenhower, *The Papers of Dwight David Eisenhower*, 3: 1934, 1937, 1941–42; Hogan, 85–86; Weigley, 111–12.

⁴³ Hogan, 86–88.

Cherbourg. Cherbourg and its port became even more critical to sustain the small Allied foothold.⁴⁴

VII Corps began their attack on Cherbourg the same day as the storm, 19 June. Understanding the criticality of the port and the affect the storm had on existing supplies, Collins urged his units to attack vigorously during VII Corps' attack on 21 June. First Army staff coordinated with both the Ninth Air Force and the Navy to provide support to VII Corps attack. After five additional days of hard fighting, VII Corps captured the German commander, General von Schlieben, and taken Cherbourg. Unfortunately, VII Corps was not able to prevent the Germans from destroying most of the port facilities before they seized them. Instead of the planned three days to become operational, it took the Allies three weeks before the port became operational at all, and months before it reached its full capacity. With the capture of Cherbourg, First Army accomplished the overall objective of Operation Neptune. Now it could completely turned its attention to breaking out of the peninsula.⁴⁵

Analysis

Leading up to and during Operation Neptune, the First Army staff successfully conducted the operations process. Three areas deserve highlighting: the initial planning

⁴⁴ Atkinson, 113–16; Eisenhower, *The Papers of Dwight David Eisenhower*, 3: 1937; Bradley, 302–7; Harrison, 422–26; Hogan, 87–90; Sylvan, 26–29. A preplanned emergency supply of ammunition towed on large barges was potentially the only thing sustaining First Army operations after the weather destroyed the supplies on the beachheads. The storm destroyed over 20,000 vehicles and 140,000 tons of supplies. Additionally, Bradley chose to fly in ammunition instead of additional troops on the available aircraft.

⁴⁵ Atkinson, 116–120; Eisenhower, *The Papers of Dwight David Eisenhower*, 3: 1938, 1962; Bradley, 311–14; Harrison, 442–49; Hogan, 90.

and preparation for Operation Neptune; the establishment and control of the beachheads; and the assault on Cherbourg. Throughout each of these three actions, the staff demonstrated excellent communication both within the staff and outside the staff. They assisted subordinate commanders, staffs, and units, and informed units and organizations outside the headquarters. Additionally, the First Army staff officers were adaptable and flexible in solving problems throughout the operation.

Beginning with the initial planning, the First Army staff established its forward planning group and collocated with the 21st Army Group in London. After First Army published and briefed the operations plan for Neptune, they provided liaisons to their subordinate corps to assist planning and modifying the First Army's plan as required. The collocation of the planning groups of the army group, army, and corps facilitated communication and assisted collaborative planning. Without this close coordination and communication, the amphibious assault would have involved a much greater degree of risk.

Once the assault began, the staff received and provided reports to both the army group and the corps. These reports provided situational understanding to higher headquarters, and enabled communication between the two separated corps until the linkup at Carentan. Once on shore, the First Army staff continued close coordination with the air force, navy, and services of supply to facilitate beachhead operations. Once the corps established large enough beachheads, the First Army staff established the corps rear areas. This freed the corps staffs to focus on fighting the fight while the army staff focused on building up the follow on forces and supplies needed to sustain the assault. This coordination was especially necessary after the storm destroyed much of the artificial harbor and the equipment and supplies on shore. The corps staffs would likely

have been overwhelmed by having to simultaneously control the fight and deal with such a severe setback.

The storm and the shortage of supplies greatly affected operations. The staff's recommendations to Bradley for restrictions on the use of ammunition and the postponement of VIII Corps operations enabled VII Corps' attack on Cherbourg. It is likely that VII Corps' attack would have culminated without those control measures put in place. Additionally, the staff conducted close coordination with both the Ninth Air Force and the Navy to provide close fire support to VII Corps as it attacked.

Throughout the operation, First Army staff officers were adaptable and flexible, creating new specialized staff organizations to overcome unexpected problems. The G-4 established the Water Transportation Control to overcome difficulties at the beachheads while the G-2 established a new targeting section to collect, consolidate, and distribute intelligence to air, naval, and ground fire. Additionally, the entire staff worked together to establish a board to determine the affects the 19 June storm had on First Army operations. In each case, the First Army staff was willing to reorganize itself to overcome the identified problems. They were not rigid in their organization structure.

The First Army staff's strength during Operation Neptune came from its close communication and coordination with subordinate and adjacent units, and its adaptability and flexibility in organizational structure. These attributes and actions supported Bradley and set the conditions for a successful operation.

Operation Cobra

Background

Once First Army captured Cherbourg and established a line of communication to sustain Allied operations, it turned its attention to breaking out of the peninsula into Brittany. Eisenhower understood his forces must break out of the complex terrain in Normandy and get into more open terrain before the Germans could seal the Allies on the peninsula in stabilized, attritional warfare. This put the Allied high command under pressure to provide much needed supplies for Allied units in Normandy, while also providing support units and ships to enable Operation Anvil, the planned amphibious assault on southern France.⁴⁶

Meanwhile, the Germans were quickly repositioning forces from the Eastern Front in an attempt to push the Allies back off the continent.⁴⁷ After a counterattack from Caen failed to repel the Allies, the Germans switched to a defensive strategy to contain the Allies in the small Cotentin Peninsula. Taking advantage of the terrain, the Germans hoped to recreate the positional warfare of World War I. Holding Caen prevented the Allies from establishing a perpendicular LOC, joining their forces' laterally, while also denying them a direct route to Paris and buying time to build up a viable counterattack force.⁴⁸

⁴⁶ Bradley, 316; Eisenhower, *The Papers of Dwight David Eisenhower*, 3: 1937, 1942, 1948.

⁴⁷ Martin Blumenson, *Breakout and Pursuit* (Washington, DC: Office of the Chief of Military History, Department of the Army, 1961), 23. Hitler ordered a SS panzer corps made of two armored divisions to assist repelling the Allies.

⁴⁸ Blumenson, 27–28, 30.

A return to trench warfare was exactly what the Allies were trying to avoid. Bradley understood that the Allies relied on firepower and mobility to make best use of their military strength. In order to conduct a war of fire and movement, the Allies needed to break through the German line and begin operating against the German flank and rear areas.⁴⁹ To achieve this, the Allies settled on an overall plan in which the British Second Army continued its attack to seize Caen, holding as much German combat power there as possible, while First Army attacked south to the Seine to open the way into Brittany.⁵⁰ On 3 July, with his three corps finally in position, Bradley ordered the attack towards Coutances and St. Lo. The combination of the quality of the German forces, the difficult terrain of hedgerows and marshes favoring the defense, and the bad weather affecting air operations slowed each corps' attack.⁵¹ After two weeks of fighting with little progress to show for it, Bradley called off the attack in order to find a new point to attempt the breakout.⁵²

Narrative

The First Army staff conducted the bulk of the planning for Operation Neptune, but given the increasingly desperate nature of the situation Bradley developed the foundations of the next breakout plan himself. Spending two nights hovering over map

⁴⁹ Bradley, 317–18.

⁵⁰ Blumenson, 37–38; Bradley, 319, 325; Hogan, 90–91.

⁵¹ Blumenson, 41–42; Bradley, 321; Eisenhower, *The Papers of Dwight David Eisenhower*, 3:1971; Hogan, 91–94; Sylvan, 35–36. The shortage of ammunition continued to plague First Army during its attack south. The lack of ammunition for artillery made close air support even more critical, which only compounded the problems caused by the poor weather.

⁵² Bradley, 321.

boards, Bradley brought together the beginnings of Operation Cobra. Using heavy bombers to “blast a hole in the German line,” First Army would penetrate the German line, clear the difficult terrain and attack into Brittany.⁵³ Bradley then brought in his key staff members—Hodges, Kean, Thorson, and Dickson—to analyze and improve the plan on July 9.

To further improve the concept for Operation Cobra, Bradley brought in his corps commanders and Major General Elwood R. “Pete” Quesada, commander of IX Tactical Air Force. During this conference, Bradley described using the air strike to allow the ground forces to penetrate the strong but thin German defensive line, moving into the high prairie of central France. There the terrain favored the mobile war that Bradley and the Allies sought. Bradley continually stressed the importance of moving boldly in order to achieve the breakthrough.⁵⁴

The concept for Operation Cobra called for aerial forces to paralyze the German forces along the east-west Periers road with carpet-bombing. Two infantry divisions would then attack, securing the right and left flanks of the breach. Three divisions, two armored and one motorized infantry, would quickly follow in order to exploit the penetration by seizing Coutances and dash into Brittany. To assist, Second Army would continue to attempt to hold German forces away from First Army.⁵⁵

⁵³ Atkinson, 139; Bradley, 329, Hogan, 104.

⁵⁴ Bradley, 332; Hogan, 104; Thomas Alexander Hughes, *Overlord: General Pete Quesada and the Triumph of Tactical Air Power in World War II* (New York: The Free Press, 1995), 197–98.

⁵⁵ Blumenson, 188; Bradley, 330. Immediately following a conference between 21st Army Group and the First and Second Armies, the British began planning and

After choosing Collins and VII Corps as the main effort of the attack, Bradley put the staff to working out the details with VII Corps and the IX Tactical Air Force. The colocation of the IX and First Army's tactical command posts facilitated the planning for Cobra and coordination of air support during execution, seamlessly informing the two staffs of any changes in plans.⁵⁶ As the staffs held daily conferences, they turned the concept into a detailed plan. VII Corps made two significant changes to the concept: it added the 4th Infantry Division to assist the 9th and 30th Infantry Divisions in the initial attack and it reorganized the armored exploitation force and rerouted it towards Coutances. Collins was not as concerned by the possible arrival of enemy forces. 1st Infantry Division, with attached Combat Command B from 3rd Armored Division, would “drive through the gap cleared by the 9th Division, turn rapidly to the southwest, blocking and assisting in destroying enemy forces” between Coutances and Fontenay.⁵⁷ 3rd Armored Division would drive through the gap cleared by 4th Division, moving rapidly southwest to secure the southern exits of Coutances and the south flank of 1st Division. 2nd Armored Division would move through the gap cleared by 30th Infantry Division and seize terrain to cover the movements of the other two exploiting divisions and block any attempts of German reinforcements. While VII Corps attacked to penetrate, the other

executing Operation Goodwood. The primary intention of the operation has become controversy—it was either to aid Operation Cobra by holding the German armor forces or an attempt to breakout on its own.

⁵⁶ Bradley, 337.

⁵⁷ Headquarters, US VII Corps, *Field Order 6 (Revised Copy)* (20 July 1944), 2–3.

corps in First Army would also attack to provide continued pressure on the German forces.⁵⁸

With the detailed planning completed by July 18, Bradley and Quesada traveled to England to inform the air commanders of the plan and coordinate for the bulk of forces for the air strike. Bradley wanted to limit the excessive cratering, which could slow the movement of the exploitation forces.⁵⁹ To Bradley's surprise, the air chiefs quickly supported the chance to test saturation bombing. The air chiefs and Bradley agreed to the massive attack, the use of smaller bombs to prevent excessive cratering, and the choice of targets. A major disagreement soon erupted, however, regarding the approach path of the attack. Bradley wanted the aircraft to use Periers road as a physical landmark to facilitate a parallel approach. He argued this would help ensure that aircraft only dropped bombs south of the road, preventing damage to US units. The air chiefs wanted a perpendicular approach, arguing that it would reduce congestion over the target and maximize the massed effects of the bombs in the hour that Bradley wanted the airstrike to occur. Bradley compromised by agreeing for the ground troops to withdraw 1,200 yards away from the road, but still thought the air chiefs had compromised on using the parallel approach. Bradley and Quesada left England thinking their conference was successful, but in reality, they had not reached a clear

⁵⁸ Bradley, 332; Blumenson, 217–19; Hogan, 105; VII Corps Field Order 6 (Revised Copy), 1–4; Weigley, 149–150.

⁵⁹ Atkinson, 139–140; Bradley, 338–39; D'Este, 381, 387; Weigley, 150. The British assault on Caen used heavy bombers during the tactical offense, which had caused so much damage that they demolished the path into Caen. British forces were not able to exploit the gap until bulldozers repaired the damage, allowing the tanks to pass.

understanding or agreement with the air chiefs over the direction of the airstrikes. After the initial coordination between the commanders, the staffs should have followed up to ensure that they shared a mutual understanding and that they would honor the agreements. No evidence exists to indicate that the First Army staff conducted that coordination.⁶⁰

In addition to planning and coordinating for Operation Cobra, First Army staff and subordinate corps developed a solution to the hedgerow's effect of mobility. A sergeant in 2nd Armored Division welded four steel prongs to the front of his tank, using it as a ram to plough through the hedgerow without exposing the weaker underbelly to enemy fire. The First Army Chief of Ordnance, Colonel John Medaris, quickly directed a design of the device, nicknamed the "Culin hedgerow cutter," for mass production. In addition to having all of First Army's ordnance companies installing these devices, Medaris headed to England to procure more materiel and personnel to assist in mass production. The First Army staff quickly spread the innovation across all of its subordinate units. By the time of the attack, three out of every five tanks had a of the new Culin devices installed, and American troops soon began referring to these modified Sherman tanks as the "Rhino" tank.⁶¹

⁶⁰ Atkinson, 139–140; Bradley, 340–41; Blumenson, 221, 232–33; Cat Galioto, "Cranford Soldier Invented World War II 'Tank Tusks'," Cranford Patch, September 18, 2010, accessed March 28, 2016, <http://patch.com/new-jersey/cranford/cranford-soldier-invented-world-war-ii-tank-tusks.>; Hogan, 105; Hughes, 198–200; Weigley, 150–51. Bradley wanted to have his troops as close as possible to rapidly attack following the airstrike, refusing to move the troops more than 1,000 yards from the road. The air chiefs wanted the safety factor of 3,000 yards.

⁶¹ Atkinson, 145; Bradley, 341–42; Blumenson, 206–7; Hogan, 105–6; Weigley, 149.

First Army originally planned to begin Operation Cobra on July 21, but poor weather forced Bradley to postpone the attack until July 24.⁶² Eagerly awaiting the start of the attack, Bradley, Quesada, and Thorson moved forward to Collins' command post to observe the airstrike. Due to heavy cloud cover over the targets, Air Chief Marshall Leigh-Mallory canceled the strike 20 minutes before the heavy bombers were scheduled to arrive at the target area. Unfortunately, some of the heavy bombers did not receive the signal. Instead of approaching the target parallel to the road, the heavy bombers approached perpendicular, and many dropped their bombs west of the road, directly on top of the 30th Infantry Division, killing and wounding over 100 soldiers. Furious, both Bradley and Quesada contacted higher headquarters to find out why the bombers had approached the wrong way. After consulting Eighth Air Force, Leigh-Mallory told Bradley that the heavy bombers approach was not an accident. In order to fit all the planes required for the airstrike, Eighth Air Force planned and made the approach over the troops, thinking that Bradley had understood the danger and agreed to it in order to achieve his desired effect.⁶³ In order to attempt the attack again the next day, Leigh-Mallory needed Bradley to accept the risk of the bombers flying over the troops. Eighth Air Force planners argued that they did not have time to change the flight route and brief the crews on the new route in time to enable a parallel attack on July 25; First Army

⁶² Bradley, 343; Blumenson, 210; D'Este, 400; Headquarters, VII Corps *Report After Action Against the Enemy 1-31 July, 1944* (US VII Corps, 9 August 1944), 20; Hogan, 106; Hughes, 201; Weigley, 152.

⁶³ Atkinson, 142; Bradley, 346–47; Blumenson, 231–33; Headquarters, VII Corps, *Report After Action*, 27; Hogan, 107; Hughes, 207–9; Sylvan, 67–69; Weigley, 152–53.

would have to postpone the attack further to allow that. Unhappily, Bradley accepted the risk in order to achieve the surprise that he desired.⁶⁴

The next morning Bradley again viewed the airstrikes from Collins' command post. Shortly after the end of the bombings, units began reporting that some of the bombers had once again released bombs early, striking friendly positions and causing 600 casualties, including 111 killed—a far worse death toll than that of the 24th. Later in the day, Bradley learned of the death of Lieutenant General Lesley J. McNair, who had moved to the front to observe the preparatory bombing from a foxhole with the ground troops. Fearing that news of his death might affect the ongoing deception operation—Operation Fortitude—the Allies delayed announcement of McNair's death, and initially did not admit that friendly bombs had killed him. Eighth Air Force's poor execution of the bombing attacks created resentment and a rift between ground forces and strategic air forces.⁶⁵

In spite of the friendly casualties it caused, the carpet bombing succeeded in shocking and disrupting the German defenses. VII Corps quickly attacked, meeting some German resistance. Although the ground forces failed to achieve all of their initial objectives, the infantry divisions did destroy most of the remaining German defenders, creating the gap that the exploitation forces required. Having secured the required north-

⁶⁴ Bradley, 348; Blumenson, 233.

⁶⁵ Atkinson, 143–4; Bradley, 348–49; Blumenson, 236; Calhoun, 321–22; D'Este, 401; Headquarters, VII Corps, *Report After Action*, 29–30; Hogan, 107; Hughes, 214–15; Sylvan, 70.

south roads, Collins decided to commit the armored exploitation forces beginning the next morning, July 26.⁶⁶

To assist VII Corps and their armored exploitation forces, First Army staff and IX Tactical Air Force carefully planned the air-ground cooperation. They established a joint air operations section under one roof that received air support requests and secured quick action of the IX Tactical Air Force—a unit that employed tactical bombers, much more appropriate for support to ground combat troops than heavy bombers. First Army liaison officers briefed pilots at the airfield on the air support missions and the current situation on the ground. On completion of the air missions, the liaison officers debriefed the same pilots to gain information that they then passed on to the ground forces. One of the most successful means of cooperation was the integration of air support parties with each armored force. Moving with the head of each force, these parties communicated directly with the aircraft providing armed reconnaissance overhead. To help protect the air support parties, Bradley provided IX Tactical Air Force with tanks. By the end of Operation Cobra, the IX Tactical Air Force had destroyed or damaged over 594 tanks and 1,856 other vehicles. The success of the close air-ground coordination not only helped eliminate German resistance, it also helped repair the damage to morale caused by Operation Cobra's preparatory bombings.⁶⁷

With the supporting air cover, VII Corps' exploitation forces raced south, reaching the edge of Coutances the evening of July 27. Bradley decided to continue to exploit the

⁶⁶ Atkinson, 144–46; Bradley, 358; Blumenson, 240, 245–46; D'Este, 402–4; Headquarters, VII Corps, *Report After Action*, 28–30; Hogan, 110; Hughes, 219; Weigley, 155.

⁶⁷ Bradley, 337–38; Blumenson, 208, 333–34; Headquarters, VII Corps, "Report After Action," 30, 33, 38, 42; Hughes, 183–84, 219–21; Weigley, 162–66.

success made by VII Corps. He ordered his corps to destroy the German forces remaining north of Coutances and to continue pursuing the German forces retreating on the western portion of the Cotentin. To aid the corps, First Army shifted the corps boundaries to facilitate reorganization before the Germans could form a new defensive line.⁶⁸

In less than three days, the First Army had finally achieved the breakthrough that would enable the mobile warfare that the Allies desired. On August 1, Bradley assumed command of the 12th Army Group, leaving Hodges as the commander of First Army for the remainder of the war. In addition to his two aides, Bradley only took his G-1, O'Hare, with him. The rest of the staff remained in place to continue with Hodges for the remainder of the war.⁶⁹

Analysis

During Operation Cobra, the First Army staff did an excellent job of assisting its subordinate commanders, staff, and units with planning and communication. It did a poor job in coordinating with other headquarters, most notably the Eighth Air Force, which contrasted with the staff's excellent coordination with the IX Tactical Air Force.

Once Bradley developed the broad concept of the operation and picked VII Corps as the main effort, the First Army staff worked closely with VII Corps and IX Tactical Air Force staffs in order to develop a detailed plan. The combined and parallel planning between First Army staff and VII Corps staff for Operation Cobra differed from the planning for Operation Neptune. Previously, First Army issued a detailed plan to VII

⁶⁸ Blumenson, 287; Hogan, 110.

⁶⁹ Atkinson, 147–48; Bradley, 358–60; D'Este, 408; Hogan, 122; Sylvan, 81.

Corps. For Cobra, Bradley and key staff members developed a broad concept, which the First Army staff assisted the VII Corps staff in developing a detailed plan. First Army's assistance provided the additional planning manpower which reduced the amount of time needed to produce the detailed plan.

One of the most successful things that emerged from this combined and parallel planning was the effective use of tactical air cover to support the exploitation forces. Showing adaptability and flexibility again, First Army created a new subsection, the joint air operations section. This section consolidated, reviewed, and assigned all air support requests to the supporting command, IX Tactical Air Force. Additionally, IX Tactical Air Force provided air support teams that moved with the armored forces, providing direct communication with the aircraft providing the support. By installing additional radios in the tanks, the crews of both the tanks and the aircraft could maintain close coordination while advancing rapidly.

The lack of coordination between the First Army and Eighth Air Force staffs stands in stark contrast to the effective relationship First Army established with the IX Tactical Air Force. If the staffs would have communicated, the First Army staff could have identified that Eighth Air Force staff had planned the approach to travel perpendicular rather than parallel. The staff could then have recommended to Bradley additional safety measures or change in distances to protect against friendly casualties. Instead, First Army continued to place their forces as far forward as possible on the false assumption that the aircraft would be coming in from another direction.

As during Operation Neptune, the First Army staff continued to adapt and be flexible in its structuring. It did not do as well in communicating with units and organizations outside the headquarters, specifically those that were not co-located in

their area of responsibility. With Bradley taking few members of the staff with him to 12th Army Group, the staff remained intact to face the months of fighting ahead of them with ample opportunity to continue refining staff processes and improve their effectiveness.

Operation Lumberjack

Background

Seven months after Operation Cobra's successful breakout, by March 1945 the Allies had used fire and movement to push the Germans to the western borders of Germany, eliminating many of their best units along the way, while suffering many casualties of their own. Many of the Allied senior leaders viewed crossing the Rhine as a task that could prove as difficult and costly as the cross-channel attack.⁷⁰ As the Allies conducted Operations Veritable and Grenade, advancing to the western bank of the Rhine River, many hoped to find an intact bridge, which would reduce the effort required to cross the heavily defended natural obstacle.⁷¹ Eisenhower, who had taken direct command of all Allied ground forces in Europe in September 1944, chose Montgomery's 21st Army Group as the main effort to execute Veritable and Grenade. He assigned Bradley the task of seizing the area north of Cologne to secure 21st Army Group's southern flank. To prepare and sustain a breakthrough either in the north or the south, Eisenhower had his planners coordinate with ADSEC or the army groups for both possibilities. Once the Allies had reached the western banks of the Rhine, they would begin preparing for a crossing of the Rhine north of Ruhr River to create the initial

⁷⁰ Atkinson, 547; Eisenhower, *The Papers of Dwight David Eisenhower*, 4: 2454; Weigley, 623–25.

⁷¹ Atkinson, 540–41; Charles B. MacDonald, *The Last Offensive* (Washington, DC: United States Army Center of Military History, 1984), 173; Weigley, 616.

bridgehead. Bradley devised a plan to clear any defending Germans from a triangle of land north of Cologne, to serve as a jumping-off point for subsequent operations. First Army would clear the land and then turn south to capture Cologne. Third Army would attack through the Eifel Forest, converging with elements of First Army to form two pincers and trap any Germans in the area. Bradley named the operation Lumberjack.⁷²

Narrative

In the seven months since Hodges assumed command of First Army, the command climate of First Army had slowly changed. While as a deputy commander, Hodges spent much of his time visiting subordinate corps and divisions. Once in command, he spent less and less time visiting his subordinate units. Kean, the chief of staff, assumed more responsibility for technical matters and spent less time focused on administrative tasks. This created even more friction amongst the other primary staff officers, particularly the G-2 and G-3. Additionally, continuous fighting had worn down the staff, many of whom had been working together since the operations in the Mediterranean. The stress was beginning to show.⁷³

Even prior to Lumberjack, the First Army staff had begun working on a plan to conduct an opposed crossing of the Rhine. The engineer section had been working and

⁷² Bradley, 506–7; Eisenhower, *The Papers of Dwight David Eisenhower*, 4: 2489–90, 2504–5; MacDonald, 185; Roland G. Ruppenthal, *Logistical Support of the Armies Volume II: September 1944–May 1945* (Washington, DC: United States Army Center of Military History, 1995), 373–74; Twelfth US Army Group Directives, *Letter of Instructions Number Sixteen*, 3 March 1945; Weigley, 617.

⁷³ Atkinson, 311; Bradley, 440; Hogan, 149, 193–95, 212, 219–20; Sylvan, 17–63, 180–81; Weigley, 602.

communicating with SHAEF, the Navy, the army group, and other armies on how to conduct the crossing. Even once Eisenhower shifted the effort to the 21st Army Group in the northern section, First Army staff still studied possible crossing sites and times, and developed plans for simultaneous crossings using a variety of means.⁷⁴

To prepare for the major offensives to cross the Rhine, First Army logisticians relocated supply depots, and changed the command relationship of its service units directly supporting the corps from attachment to operational control. These changes pushed forward the support to the corps while relieving the corps of administrative responsibilities for the service units. First Army was also successful in increasing their levels for most supplies. To accomplish this, First Army sent officers to ADSEC to personally inquire and resolve requisitions with long overdue shipments. This assisted some of the delivery problems. To overcome the long time for rail delivery, the field services resorted to sending their own trucks and officers to ADSEC's base depots to receive and transport the critical supplies forward. First Army worked with the ADSEC to address shortages in critical supplies and equipment. This resulted in ADSEC temporarily loaning some of its service units to First Army and raising the storage levels in ADSEC depots to better support operations.⁷⁵

First Army selected VII Corps to provide the security for the 21st Army Group along its southern flank. Due to the poor weather and condition of the roads, First Army

⁷⁴ Hogan, 247–48; MacDonald, 221; Weigley, 618.

⁷⁵ Hogan, 246–47; Ruppenthal, 360–61, 374–5. First Army had increased their supply levels to 4.5 days of rations, 6 days of fuel, and 45,549 tons of ammunition. Upon coordination with First Army demands, ADSEC increased their supply depot levels to seven days for rations and fuel, and 15 days for clothing and equipment.

approved VII Corps' request for an increased stockpile of fuel and ammunition. Beginning the attack on February 23, VII Corps completed its initial mission by the 27th. Collins continued to push the corps forward towards Cologne. III Corps, directly south of VII Corps, attacked southeast to linkup with Third Army near the Ahrweiler area. V Corps would attack to protect III Corps' southern flank.⁷⁶

To assist the corps in maintaining tempo, Hodges and the First Army staff devised a method to cross the impeding waters of the Roer River quickly and efficiently. Using the bridges secured and established by VII Corps during its attack to support Operation Grenade, III Corps would attack south to clear additional bridges upstream. Subsequent divisions would each cross bridges north of their area of operations, then attack south to secure bridges for the next division to use. Once III Corps completed its crossings, V Corps followed the same tactics. This sequencing of crossings avoided frontal attacks across the Roer, enabled attached tanks to move with the infantry, and created opportunities to attack the defending Germans in their flanks.⁷⁷

⁷⁶ Atkinson, 540–41; Hogan, 248–49; MacDonald, 185–86; Commanding General First US Army and Headquarters Staff Sections, "First US Army Report of Operations 23 February – 8 May 1945," 6, 11–12.

⁷⁷ MacDonald, 191–92; *First US Army Report of Operations 23 February – 8 May 1945*, 13.

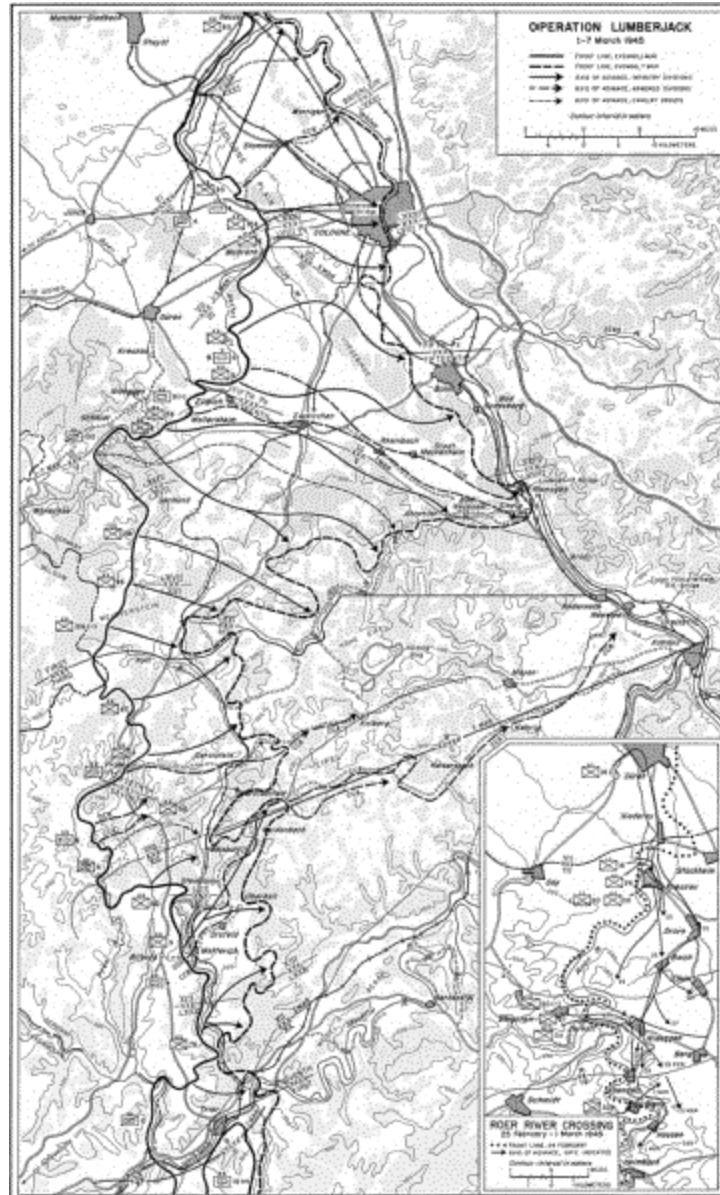


Figure 5. Operation Lumberjack

Source: Map from Charles B. MacDonald, *The Last Offensive* (Washington, DC: United States Army Center of Military History, 1984), Map VIII.

The method was so successful that III Corps penetrated the German lines and began exploitation operations much sooner than expected. Over the first several days of March, First Army staff changed corps boundaries and responsibilities to take advantage

of III Corps' success. First Army limited VII Corps to capturing Cologne, while giving III Corps the additional responsibility of clearing to the western bank of the Rhine with their existing task of linking up with Third Army. To assist his corps, Hodges made additional changes to the boundaries on 5 March, enabling VII Corps to drive to the Rhine and giving III Corps additional frontage on the Ahr River to use in its linkup with Third Army.⁷⁸

On March 7, III Corps seized an intact bridge over the Rhine. Immediately realizing the opportunity this presented the Allies, First Army ordered III Corps to establish a bridgehead so that VII Corps could secure the crossings over the Ahr River. First Army once again shifted corps boundaries to enable its subordinate echelons to seize opportunities and exercise initiative.⁷⁹ By securing an intact crossing over the Rhine, First Army enabled the Allies to shift efforts from massing for a crossing in the north to exploiting the opportunity found by First Army.

Operation Lumberjack's swift clearing of the terrain west of the Rhine, and the rapid seizure of crossings and exploitation against the defending Germans exceeded both Eisenhower and Bradley's expectations. Bradley described the operation as a textbook example and later said that the operation was one of the ones of which he was most proud.⁸⁰

⁷⁸ Hogan, 249; MacDonald, 194, 196; *First US Army Report of Operations 23 February – 8 May 1945*, 21.

⁷⁹ Atkinson, 548–53; Bradley, 510–11; Hogan, 251; *First US Army Report of Operations 23 February – 8 May 1945*, 24; MacDonald, 219–20; Sylvan, 324–25; Weigley, 626–28. Atkinson and Weigley both provide vivid accounts of the actions of Lieutenant Timmerman and Company A of the 27th Armored Infantry Battalion in seizing the Ludendorff Bridge.

⁸⁰ Bradley, 506; Hogan, 249; Sylvan, 325.

Analysis

To prepare for Operation Lumberjack and assist their subordinate units, First Army staff worked with other headquarters and units to ensure that the corps and division had the required supplies and equipment to breach and cross the Rhine. First Army engineers and logisticians' detailed planning and coordination highlight the importance of communicating with outside headquarters and units. Often using unorthodox methods to ensure the delivery of requested supplies, First Army staff ensured that the corps had the supplies and equipment they needed to execute Operation Lumberjack.

Throughout Operation Lumberjack, the First Army staff assisted its subordinate commanders and units by changing corps boundaries and priorities. This enabled adjustment of responsibilities and priorities among subordinate units, meaning the First Army staff could enable corps commanders to focus on the most critical task they needed to accomplish at any given time. These simple changes controlled the tactical actions in time, space, and purpose. This action – one of the final operations conducted by the Allies in Western Europe, serves as a textbook example of a headquarters executing operational art.

Cross Case Analysis

In addition to conducting staff activities, which US Army doctrine now refers to as the operations process, the First Army staff continuously performed several particularly significant actions during the three cases analyzed. These include assisting subordinate commanders, staffs, and units, and informing units and organizations outside the headquarters. Additionally, the staff officers proved adaptive and flexible in overcoming problems as they identified them. The staff continuously formed new subsections both

within its own organization and among outside organizations as needed to facilitate staff coordination.

The detailed planning for Operation Neptune required significant coordination with outside organizations. Co-location of the various planning sections in the same town made them more accessible to one another, reducing the time required to discuss changes in the situation and modify the plan. The staff's actions during the planning for and execution of Operation Cobra highlight the importance of communicating with outside organizations. The poor communication between First Army and Eighth Air Force resulted in friendly casualties caused by inaccurate preparatory bombing. While the staff probably could have prevented all of the casualties lost to friendly fire, effective communication between the staffs would have informed Bradley of the Eighth Air Force's refusal to change the approach direction of the bombers, limiting their ability to achieve safely the effects he desired. If better informed, Bradley could possibly have averted the costly mistakes—perhaps by convincing the Allied airmen to change approach paths, or by increasing the distance the ground troops withdrew from the front line. In contrast, First Army's close communication and coordination with IX Tactical Air Force resulted in great success of air-ground coordination in exploiting the breakout. The lessons learned from the poor coordination with Eighth Air Force may have formed the basis for the creation of the joint air operations section and the co-location of the First Army and IX Tactical Air Force's command posts, greatly enhancing the communication between the two headquarters.

In each of the case studies, the First Army staff assisted its subordinate commanders, staffs, and units. Prior to Neptune, First Army staff provided liaisons to assist the corps in planning. During the operation, First Army began assuming the

responsibilities of managing the beachhead and the buildup of combat power so that the corps could focus on fighting the Germans. As the staff identified shortages, it made recommendations and developed policies so that Bradley could prioritize resources to his main effort at each key point throughout the operation. For example, the staff recommended the conservation of ammunition during expansion of the lodgment in Normandy to ensure it could provide adequate stocks to support VII Corps' attack to capture Cherbourg. During Operation Cobra, the First Army staff conducted simultaneous detailed planning with VII Corps and IX Tactical Air Force. This enabled greater air-ground coordination between the corps and IX Tactical Air Force. Additionally, the First Army staff distributed innovations developed in one unit across the entire army. The Rhino remains perhaps the best-known example, but the staff shared numerous other innovations in materiel and tactics. During Operation Lumberjack, the First Army staff assisted its subordinate corps by controlling the physical space in which the corps operated. By shifting boundaries, the staff optimized each corps' area of operations and the tasks for which each corps retained responsibility, allowing them to focus on the most critical tasks at critical times.

Throughout all the case studies, First Army staff officers remained adaptable and flexible—for example, in their ability to optimize their organizational structure. As they identified new requirements or problems, the staff created new subsections multiple times. Prior to Operation Neptune, the First Army created planning groups to conduct joint planning with higher headquarters, and created new sections, like armor section, to advise the commander on unique and special capabilities. During the execution of Operation Neptune, the First Army staff continued to create new sections to manage the beachhead and control supplies and transportation issues. The G-2 also created a new

subsection to collect, to consolidate, and to distribute intelligence to air, naval, and ground fire support organizations. During Operation Cobra, the creation of the joint air operations section greatly facilitated air-ground coordination and the provision of tanks to the IX Tactical Air Force enabled air support teams to maintain communication with the lead elements of the armored exploitation forces. The simple changes in boundaries reveal the staff's flexibility, enabling it to change the plan as opportunities presented themselves. This allowed the subordinate corps to take advantage of opportunities and maintain the tempo of the offensive.

Finally, there was little evidence that directly supported the need for a strong chief of staff to coordinate the staff. This does not refute the requirement for a strong chief of staff, but highlights the need for staff officers not just to keep records of the products they produced, but also keep accounts of how they produced them, primarily who they communicated with, and how, during various staff actions. Historians and current staff officers could study those records and learn how to better develop and lead staffs in the future.

Conclusion

First Army staff assisted Bradley and then Hodges by communicating effectively. Effective communication separates staffs that assist the commander and those that do not. The evidence showed that First Army's staff officers communicated amongst themselves, while also communicating with units and organizations outside the headquarters, creating shared understanding within the staff and with other headquarters and units. Effective staffs also assist the commander by assisting subordinate commanders, staffs, and units. This reduces the number of problems for the commander and provides time and space for the commander to focus on truly important decisions. Staff organization and structures can greatly assist how the staffs communicate within and outside themselves.

Staff officers at higher-level headquarters often struggle with identifying the role and 'fight' of their headquarters. The case studies show that in addition to resourcing their subordinate units, simple control measures like changing boundaries, priorities, and task organizations enable and assist their subordinate units in accomplishing their missions. Staff officers should increase their understanding and purpose of these control measures during planning and directing operations.

Historians tend to focus more on commanders' actions than staff actions in most histories. This probably has much to do with interest in the great captains of military history, who overshadow the staff officers that help make those great captains successful by working in nameless, faceless obscurity. This also limits the US Army's ability to learn how to improve staff functions by studying historical accounts of army operations. Staff officers should therefore keep a record not just of the final products they produce, but also their actions in creating those orders and briefings—primarily who

they communicated with, and how, during various staff actions. The preparation of operational and unit histories in the modern era often has the character of a task to perform—usually in a hasty and only marginally useful manner. Staffs should refer to operational histories and the accounts of staffs in previous US Army conflicts to identify the most useful information they contain. This will provide a guide for modern staffs to increase the amount of evidence they record, enabling better analysis of how staffs effectively assist commanders not only in after action reviews, but over longer periods of time as military historians continue to study the past to gain hints of what the future might hold.

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